

Appin No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No. 14XZ101/GEM-0085

### **Remarks/Arguments**

**This Amendment includes a Change of Address.**

**This Amendment includes a Petition to extent the term for response by three months to December 3, 2004.**

#### **Status of the Application:**

##### **Status of the Drawings:**

The Examiner has acknowledged and approved the drawing correction filed 11/14/2003 in the Office communication of 02/14/2003.

##### **Status of the Priority:**

The Examiner is requested to confirm or acknowledged receipt of a certified copy of French Patent Application No. 0004407 filed 04/06/2000 for a priority under 35 USC 119(a)-(d).

##### **Status of the Information Disclosure Statement:**

The Examiner has acknowledged the timely submission of an Information Disclosure Statement filed 04/04/20001 (the filing date of the application) in the Office communication of 02/13//2002.

##### **Status of the Claims:**

Claims 1 to 60 are pending in the application. Claims 1 to 60 are rejected under 35 USC 112, first paragraph. Claims 1 to 28 are further rejected under 35 USC 112, first paragraph. Claims 1 to 60 are rejected under 35 USC 103(a) as being unpatentable over Yamasaki et al. (US 6,242,114).

##### **Status of the Detailed Description:**

The Detailed Description, i.e., the Specification, is objected to under 35 USC 112, first paragraph.

#### **General Remarks Regarding the Rejection Under 35 USC 112, first paragraph**

At the outset, the applicant regrets the confusion in the examination of the present application that gave rise to misunderstandings and mischaracterizations of the terms and

Appln No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No. 14XZ101/GEM-0085

phrases recited in the Detailed Description and the claims as filed and as amended. It is believed that the present amendment will overcome any past confusion, misunderstandings and mischaracterizations, particularly in regard to the claims as presently amended. It should be noted that text of the independent claims has been reviewed and approved by the inventor for technical and scientific accuracy. It should also be noted that the inventor, as one skilled in the art, under 35 USC 112, first paragraph, is convinced that the claims as amended and the description as filed is enabling.

For purposes of illustration only and not in any way limiting as to the scope and extent of protection, please consider the following comments with respect to the independent claims 1, 2, 8, 14, 22, 25, 29, 30, 42, 43, 44, 45, 46, 58, 59, and 60.

In claim 1, the recitation of "a source of radiation" may refer drawing feature 19, 23; in claims 2, 8, 14, 22, and 25, the recitation of "means for emission" may refer to drawing feature 19, 23; in claims 30, 42, 43, 44, 46, 56, 58, 59 and 60, the recitation of "means for intensifying" may refer to drawing feature 19, 23; and in claim 45, the recitation of the "providing an intensifier" may refer to drawing feature 19, 23 and 45.

In claims 1 and 29 the recitation of "providing a detector" may refer to drawing feature 20, 24, 45; and in claims 2, 8, 14, 22, 25, 30, 42, 43, 44, 46 58, 59, and 60 the recitation of "means for detecting" may refer to drawing feature 20, 24.

In claims 1, 29, the recitation of "providing a filter" may refer to drawing feature 19, 25; and in claims 2, 8, 14, 22, 25, 30, 42, 43, 44, 45, 46, 58, 59, and 60 the recitation of "means for filtering" may refer to drawing feature 19, 25.

#### **Object to Detailed Description and Rejection of Claims 1-60**

The rejection of claims 1-60, all the claims in the application, under 35 USC 112, first paragraph, is believed overcome by the present amendment to the claims. Present amendment to the claims does not recite that the detector is photosensitive to light that is interrupted or blocked and the term "photosensitive" has been deleted. Accordingly, the

Appln No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No.14X2101/GEM-0085

rejection of claims 1-60 under 35 USC 112, first paragraph, is no longer a basis for rejecting the claims.

**Rejection of Claims 1-28 Under 35 USC 112, first paragraph**

The applicant traverses the rejection of claims 1-28 under 35 USC 112, first paragraph, for the following reasons, in accordance with the statute and case law.

35 USC 112, first paragraph, requires a written description of the invention that is separate and distinct from the enablement requirement. The purpose of the written description is broader than to merely explain how to "make and use", the applicant must also convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention. The invention is, for purposes of the "written description" inquiry whatever is now claimed.

35 USC 112, first paragraph, requires a written description of the invention that enables any person skilled in the art to make it and use it. To satisfy the requirement, a patent application must describe the invention so that one skilled in the art can make and use the invention without undue experimentation, *Durel Corp. v. Osram Sylvania Inc.*, 59 USPQ 2d 1238, 1306 and 1244 (Fed. Cir. 2001) but the written description need not include subject matter that those skilled in the art already know.

The applicant has satisfied the full extent of 35 USC 112, first paragraph. Even the Examiner presumably acknowledges that 35 USC 112, first paragraph, is enabling for providing a filter for an intensifier emission that is sensitive to temperature of the intensifier. This in itself is sufficient to entitle the applicant to a claim having a scope of extent and protection consistent with such a claim feature. Each of the independent claims recite the source of radiation or the means for emission or the means for intensifying or providing an intensifier and each of the independent claims recite that the emission spectrum has a part that is temperature dependent and another part that is independent of temperature. The description and the claims are not directed to any or all light sources that do not have this characteristic.

Appln No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No. 14XZ101/GEM-0085

In this rejection, the Examiner is omitting or negating the feature expressly expressed in the independent claims, to wit, the emission spectrum has a part that is temperature dependent and another part that is independent of temperature. Each and every feature of a claim as presented by the applicant is entitled to consideration and it is impermissible for the Examiner to reconstruct or interpret the recitations of the claims as presented.

Furthermore, the detailed description provides a specific exemplary operative and functional embodiment of the claimed invention, consistent with the wording of the claims. It is submitted that within the legal definition and interpretation of 35 USC 112, first paragraph, the applicant has provided an enabling description to practice the invention and has demonstrated that the inventor was in possession of the invention as claimed. All one skilled in the art needs to practice the invention as claimed is an identification of an emission spectrum that has a part dependent on temperature and a part that is not dependent on temperature and then to provide a filter in which the dependent part is intercepted or cutoff and the independent part is transmitted.

The applicant submits that the specification is enabling by disclosing an operative and functional embodiment in the description for the criteria recited as the subject matter of the claims. The applicant is entitled to a scope and extent of protection in accordance with the claims where the claims recite the features of the disclosed invention.

#### **Rejection of Claims 1-60 Under 35 USC 103(a)**

Claims 1-60 are rejected under 35 USC 103(a), as being unpatentable over Yamasaki et al. (US 6242114). The applicant traverses the rejection for the following reasons.

The Examiner admits that Yamasaki et al. fails to "limit the reason for passing some radiation and intercepting others"; however, the Examiner alleges, "it would be obvious to configure the filter to control the emission of the fluorescent material in any way". Initially, it may be observed that the present invention does not affect the emission spectrum of the source of radiation or the means for emission or the means for

AppIn No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No.14XZ101/GEM-0085

intensifying or providing an intensifier; only the filter provides a "control", i.e., transmission, of the emission spectrum; the filter does affect the radiation from the source in accordance with the features recited in the claims; and the detector is responsive to the spectrum transmitted by the filter.

Even if an invention as claimed is not identically described in a single prior art reference the invention as claimed is not patentable if the differences between the subject matter as claimed as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter claimed pertains (35 USC 103(a)). To establish a prima facie case of obviousness there must be some suggestion or motivation or teaching in the prior art to modify the reference (or combine the reference teachings), some reasonable expectation of success, and the prior art must teach or suggest all of the claim limitations *Karsten Manufacturing Corp. v. Cleveland Golf Co.*, 58 USPQ 2d 1286 (Fed. Cir. 2001) and *In re Kotzab*, 55 USPQ2d 1313 (Fed. Cir. 2000). Four factual determinations, described in *Graham v. John Deere Co.*, 383 US 1, 17-18 (1966), ought to be made when obviousness is in question: (1) a determination of the scope and contents of the cited prior art; (2) the differences between the cited prior art and that which one seeks to be patented, i.e., the claimed subject matter; (3) the level of ordinary skill needed in the art; and (4) evidence of secondary considerations, such as commercial success *Id.* In applying the factual determinations, a prima facie case of obviousness (1) must be supported by substantial evidence in the record and not an assessment of basic knowledge and commonsense *In re Zurko*, 59 USPQ 2d 1693, 1385-86, 1697 (Fed. Cir. 2001) and (2) that the cited prior art addresses the same problem in the same field of art *In re Inland Steel Co.*, 60 USPQ 2d 1396, 1363 and 1402 (Fed. Cir. 2001). A prima facie case of obviousness can be established by the teaching in the cited prior art where the nature of the problem to be solved in the prior art is the same as suggested in the claims *Akamai Technologies, Inc. v. Cable & Wireless Internet Services, Inc.* USPQ2d (Fed. Cir. 2003) and *Ruiz v. A.B. Chance Co.*, USPQ2d (Fed. Cir. 2004). *But, that is not met by Yamasaki et al.*

Appln No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No.14XZ101/GEM-0085

The cited Yamasaki et al. discloses repeated emphasis of environmentally stable and durability to temperature with respect to every Fig. 1-10 showing the physical structure of the subject matter disclosed. There is no recognition by Yamasaki et al. of any spectral emission wavelength as having a temperature dependency.

Non-obvious patentability can be based on the discovery or identification of the problem to be solved independent of the solution, which may be obvious or simple. Discovery of the source of the problem is part of the "subject matter as a whole" inquiry as recited in 35 USC 103(a) *In re Koslow*, 217 USPQ 1089, 1094 (Fed. Cir. 1983). The problem to be solved and the discovery in the instant application are the temperature dependence and non-temperature dependence of the emission spectrum.

In Yamasaki et al. the presence of any filter is not for any temperature dependence emission wavelength but for an entirely different problem, purpose and function: control the percentages of incident light in the absorption spectrum that can read the fluorescent material or controlling emission or attenuation of the fluorescent material – col. 8, lines 35-48.

All the independent claims of Yamasaki et al. – claims 1, 12, 27, 29, 33, 34, 35, 36, and 37 – recite a fluorescent layer that emits light in a given wavelength based on a response to absorption of incident light within a selective wavelength band and an optical filter for modifying one of the absorption bands of light and the emission band of light. Broad claim entitlement regardless of emission or absorption wavelength based on satisfying defined functional claim criteria – but no recitation of temperature dependence. The present applicant is entitled to the same broad scope for the same reasons as recited in the claim, including temperature dependence.

At col. 2, lines 50-54, Yamasaki et al. teaches eliminating thermal and time-dependent deterioration associated with the prior art systems (emphasis added). This disclosure is inconsistent with the present invention as claimed which does not eliminate thermal deterioration but instead recognizes that the emission spectrum is temperature dependent and can be compensated by a filter having a transmission spectrum according to the teaching of the present application.

Appln No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No. 14XZ101/GEM-0085

The Examiner alleges, "it *would* be obvious to configure the filter to control the emission" (emphasis). This is a conclusion without substantiation in the prior art, and at best, represents an impermissible "hindsight" determination of the prior art: there is no basis in the cited prior art of the recognition of temperature dependent emission as a problem that can be solved with a suitable filter according to the disclosed invention and as claimed.

The Court of Appeals for the Federal Circuit has repeatedly held that a rejection under 35 USC 103 must satisfy the criteria of *Graham vs. Deere*. The rejection has failed to satisfy these criteria, particularly of how the features and functions recited in the claims can be found in the cited reference and how any differences between the features and functions are obvious to one skilled in the art. It is not sufficient to merely conclude that the one skilled in the art *could* modify or adapt the cited prior art to therefore read on the features and functions recited in the claims. The Examiner must establish that one skilled in the art *would* modify or adapt the cited prior art and demonstrate the motivation or nexus of the prior art to the features and functions recited in the claims.

The Examiner has referred to col. 4, lines 38-44 and col. 8, lines 42-48 and col. 9, lines 47-52 as support for the rejection under 35 USC 103(a). It is submitted that none of the referrals indicated support a basis for the rejection of the claims. None of the referrals indicated recite an emission that is temperature dependent. The Examiner also refers to col. 2, lines 50-54 as support for the rejection under 35 USC 103(a). It is submitted that this referral is directed to thermal and time-dependent deterioration of a filter and not the recognition of selecting a filter based on the temperature dependent emission of a source of radiation.

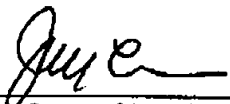
As indicated above, each of the independent claims as presently amended recite a combination of three features: "a source of radiation" or a "means for emission" or a "means for intensifying" or "providing an intensifier" and "providing a detector" or "means for detecting"; and "providing a filter" or "means for filtering". In each of the independent claim each of these features is further claimed has having certain properties and functional characteristics. The cited Yamasaki et al. fails to disclose such a

Appln No. 09/826,202  
Amdt. Dated November 12, 2004  
Reply to Office Communication of 06/03/2004  
Docket No.14XZ101/GEM-0085

and functional characteristics. The cited Yamasaki et al. fails to disclose such a combination of features with the recited properties and functional characteristics.

In light of the foregoing, the Applicant respectfully submits that the Examiner's rejections under 35 USC 112, first paragraph and 35 USC 103(a) have been traversed and respectfully requests that the Examiner reconsider these rejections. Accordingly, the Applicant requests a timely Notice of Allowance in this application.

Respectfully submitted,  
CANTOR COLBURN LLP  
Applicant's Attorneys

By   
Jay L. Chaskin  
Registration No. 24030  
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield CT 06002  
Telephone: 860-286-2929  
Fax: 860-286-0115  
Email: jchaskin@cantorcolburn.com